

Jan. 15



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBE105-31702W14-1
Job Sheet 186062



Part No: RBE105-31702W14-1

Job Qty: 4 pcs

Part Name: Drift



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/9/18

Job Tracking No:

Due Date: 12/7/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBE105-31702W14 Rev 1. IPP Rev. A 18.11.08 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Conventional Lathe - 1	4		12/7/18	0.00	1.00	Conventional Lathe - 1		
		pcs					Conventional Lathe - 2		
110	QC 2	4		12/7/18	0.00	0.00	QC 2 - 1		
		pcs					QC 2 - 12		
							QC 2 - 14		
							QC 2 - 16		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 38		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 54		
							QC 2 - 56		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		



Container No: S146094



Part: RBE105-31702W14-1

Job No: 186062

Serial No/Batch: S146094

Revision: 1

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Alderley Street
Bentley, Greater Manchester M64 1K7

0161 275 0900
info@dartaero.co.uk

Date: 01/21/19



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Container No: S146094



Part: RBE105-31702W14-1

Job No: 186062

Serial No/Batch: S146094

Revision: 1

Inspector:

Exp Date:

Instructions:

Date: 01/21/19

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

				QC 2 - 8	
120 Conventional Mill - 1 - B4B	4 pcs	12/7/18	0.00 0.67	Conventional Mill - 1 - B4B	
				Conventional Mill - 2 - B4B	
130 QC 2	4 pcs	12/7/18	0.00 0.00	QC 2 - 1	
				QC 2 - 12	
				QC 2 - 14	
				QC 2 - 16	
				QC 2 - 17	
				QC 2 - 19	
				QC 2 - 2	
				QC 2 - 20	
				QC 2 - 22	
				QC 2 - 23	
				QC 2 - 25	
				QC 2 - 32	
				QC 2 - 33	
				QC 2 - 35	
				QC 2 - 38	
				QC 2 - 39	
				QC 2 - 4	
				QC 2 - 40	
				QC 2 - 44	
				QC 2 - 45	
				QC 2 - 48	
				QC 2 - 49	
				QC 2 - 50	
				QC 2 - 51	
				QC 2 - 52	
				QC 2 - 54	
				QC 2 - 56	
				QC 2 - 57	
				QC 2 - 62	
				QC 2 - 63	19/11/21
				QC 2 - 8	
140 QC 8	4 pcs	12/7/18	0.00 0.00	QC 8 - 12	19/01/21
				QC 8 - 14	
				QC 8 - 16	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 38	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
150 Outsource - 13 - Zinc Plating	4 pcs	12/7/18		GRO002-VC	19-01-21
160 Packaging 2-1 - Receive - B4B	4 pcs	12/7/18	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

				Packaging 2 - 3 - B4B	JAN 28 2019
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 14 - B4B	
170 QC 6	4 pcs	12/7/18	0.00 0.00	QC 6 - 16	DAS
				QC 6 - 38	38
				QC 6 - 42	9-89
				QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
180 Packaging 3-1 - Stock - B4B	4 pcs	12/7/18	0.00 0.00	Packaging 3 - 1 - B4B	DAS 28 9-89
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
190 QC 21 - SA	4 pcs	12/7/18	0.00 0.00	QC 21 - SA - 16	DAS
				QC 21 - SA - 21	21 9-89
Part Op 100 - 1-Machine as per DWG. 2-Deburr Descriptions: 120 - 1-Machine as per DWG. 2-Deburr 140 - Engrave T/N and/or P/N number using MARKTRONIC engraver as per DWG. 150 - -Issue P/O: 042341 -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required 160 - C of C required.					

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
MT-4140QT-R1.125	AISI 4140 Quenched &Tempered Steel Round Bar 1.125" Dia.	1.5120 ft (.378 ea)	100-Conventional Lathe - 1	5053644

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Conventional Lathe - 1	MT-4140QT-R1.125	2	17	0

Part Specifications	
Specifications could not be found.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

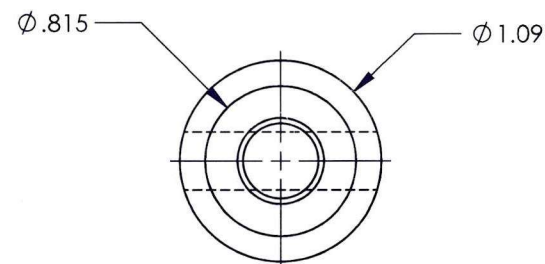
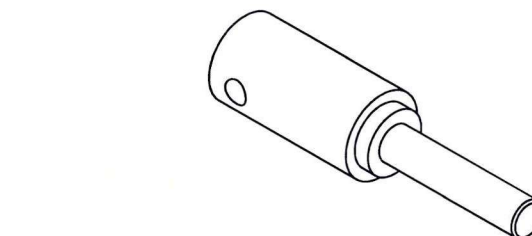
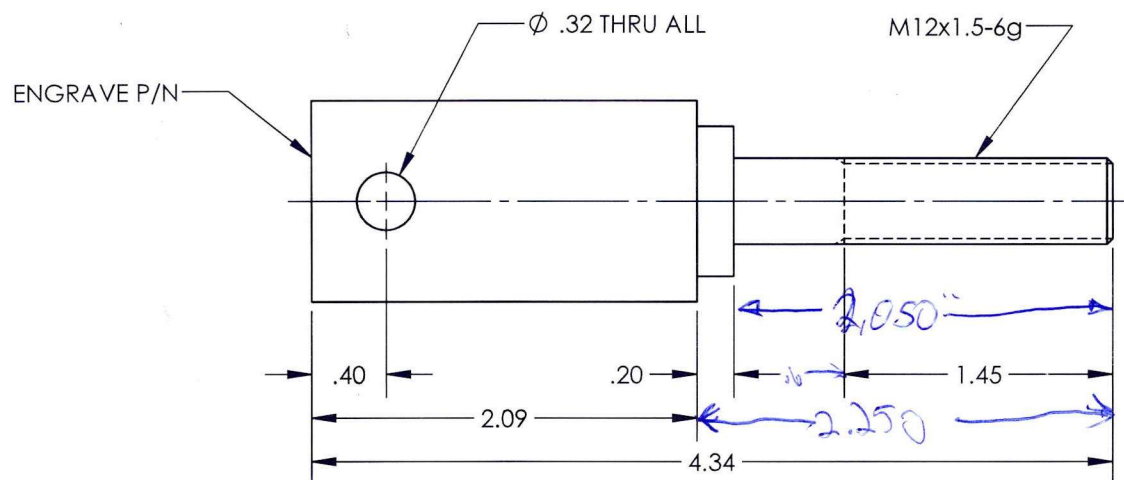
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED



SHOP COPY
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 186662 ms
1811-09

nut location
91415A125
G-A 068

(1)
DRIFT

DART AEROSPACE	
TITLE PUSHING-OUT TOOL	
DWG NO. RBE105-31702W14-1	REV 1
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT FINISH ZINC PLATE	.XXX $\pm$.005 FRACTIONS $\pm$ 1/8 .XX $\pm$.01 ANGLES $\pm$ 5° .X $\pm$.1 SURFACES = 125/
SPEC ASTM B633 TYPE I SC 2	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: CLOUGH	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	EC145
APPROVED: GILBERT	
SCALE 1:1	DATE 12/28/2015 SHEET 2 OF 3



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada
Tel (613) 632-5200

PURCHASE ORDER PO042341



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO042341
PO Date: 1/21/19
Due Date: 1/25/19
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	186062	RBE105-31702W14-1	Drift -Issue P/O; -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	1/25/19	9 pcs	0 pcs	9 pcs	\$2.6470588/pcs	\$23.82
Line Item Note ** asap :(**											
2	188456	RBW6430G02931-8G	Extractor YELLOW OR BLACK ZINC PER ASTM B633 TYPE 2 CLASS 2 CERTIFICATE OF CONFORMANCE IS REQUIRED	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$2.6470588/pcs	\$15.88
3	188502	RBEL135M-2901-101-21	Slide -Issue P/O -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 1018 -Certificate of Conformity is required	Firmed	-	1/25/19	10 pcs	0 pcs	10 pcs	\$9.00/pcs	\$90.00

Line Item Note ** NEED BY FRIDAY 01/25 **



Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042341



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	187498	RB T103216-101	Spanner Assembly Outsource13 (Outside Processing - Zinc Plating) -Issue P/O to GROUPE ALTECH: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	1/25/19	4 pcs	0 pcs	4 pcs	\$2.6470588/pcs	\$10.59
5	186570	RBW6205G19332-3G-1	Draw Bolt -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Certificate of Conformity is required	Firmed	-	1/25/19	5 pcs	0 pcs	5 pcs	\$2.6470588/pcs	\$13.24
6	186573	RBW6205G19432-3G-1	Draw Bolt -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Certificate of Conformity is required	Firmed	-	1/25/19	4 pcs	0 pcs	4 pcs	\$2.6470588/pcs	\$10.59

Line Item Note ** For Friday morning please **

7	188457	RBW6521G00131-8G	Oil Seal Installation / Removal Kit YELLOW ZINC PER ASTM B633, TYPE 2 CLASS 2	Firmed	-	1/25/19	6 pcs	0 pcs	6 pcs	\$8.8970588/pcs	\$53.38
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Line Item Note

Certificate of conformity is required



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042341



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
Grand Total:											\$217.50

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 1/22/19 10:46 AM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(016161-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

016161 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.				
22-Jan-2019		Aman			042341 ✓				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order	
1	RBE105-31702W14-1 Rev.	RBE105-31702W14-1 ZINC PLATE ASTM B633 TYPE 2 SC2	ZINC CH	9	9 ✓	0	0	0	38 3-88
2	RBW6430G02931-8G Rev.	RBW6430G02931-8G ZINC PLATE ASTM B633 TYPE 2 CLASS 2	ZINC CH	6	6 ✓	0	0	0	
3	RBEL135M-2901-101-21 Rev.	RBEL135M-2901-101-21 ZINC PLATE ASTM B633 TYPE 1 SC2	ZINC CH	10	10 ✓	0	0	0	
4	RBT103216-101 Rev.	RBT103216-101 ZINC PLATE ASTM B633 TYPE 2 SC2	ZINC CH	4	4 ✓	0	0	0	
5	RBW6205G19332-3G-1 Rev.	RBW6205G19332-3G-1 ZINC YELLOW ASTM B633 TYPE 2 SC2	ZINC CH	5	5 ✓	0	0	0	
6	RBW6205G19432-3G-1 Rev.	RBW6205G19432-3G-1 ZINC YELLOW B633 TYPE 2 SC2	ZINC CH	4	4 ✓	0	0	0	
7	RBW6521G00131-8G Rev.	RBW6521G00131-8G STRIP ZINC YELLOW PER ASTM B633 TYPE 2 CLASS 2	ZINC CH	20	20 ✓	0	0	0	

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.